

HARBOR DEFENSES.

PLANTING DEADLY EXPLOSIVES TO PROTECT THE COAST.

What a vast amount of labor, skill, time and money is needed to complete a thorough system of coast defense—advantages of the torpedo.

There is a very widely diffused idea among people who have not made a special study of the subject that torpedoes, and torpedoes alone, can defend any harbor against a hostile attack.

The destructive effects of a few torpedo explosions under the most favorable circumstances have caused this branch of warfare to assume an undue importance, an importance wholly unwarranted by the results and created by generalizations from isolated instances, entirely without regard to the natural limitations of the efficiency of any torpedo system, however perfect.

It is the object of this article to endeavor to show the actual capabilities of torpedoes, the results attainable by their use, and the restrictions inevitably attending their indefinite expansion into a complete system of defense.

Great guns must play an important part in all harbor defense, but for the proper and adequate defending of navigable channels, bays and moorings, exploded by contact, are the mainstays.

With their use, however, a host of perplexing conditions arise, the twisting and wearing of the cables and moorings, the depression due to the currents, the danger of sympathetic explosions, the leaking of the cases, the obstruction of the channel for friendly navigation—all these have to be overcome as best they may be.

Where a port has several navigable channels, and it is practicable to sacrifice one or more, their closure by means of self acting torpedoes is easy.

Where a channel, however, cannot be entirely abandoned, self acting mines are useless, for in order to be thoroughly reliable they must be as dangerous to a friend as to an enemy. Furthermore, their planting, and much more, their removal upon the cessation of hostilities is to be accomplished only at great risk. The limited applicability of ground mines is well known. Torpedo science furnishes two other types for harbor defense; the buoyant mine and the dirigible torpedo, although the latter properly forms a distinct class.

Great nicety in planting torpedoes cannot be expected, and this fact, coupled with the inevitable shifting of the mines from various causes, leads directly to the conclusion that a great number of mines must be relied upon rather than precision in their manipulation.

Despite the number of mines, a vessel attempting to pass the lines may still fail to strike a mine hard enough to work the circuit closer. To meet this contingency a perfect torpedo system must provide means for firing the mines at will in groups of three or four. It will always be possible to accurately locate a vessel within a dangerous space of this number of mines, and their simultaneous explosion will have the desired effect.

To furnish a passage for the electric current many cables are needed, and to avoid confusion some regular method of planting must be adopted. It is convenient to plant the torpedoes in groups capable of being fired by judgment, these groups constituting the units, which are combined into the larger unit whose limit is generally the number of mines that can be operated through a single seven core cable.

The grand groups thus formed are arranged in lines, the latter radiating in such a manner from the operating casements that the separate units can be easily located by triangulation. The intervals between the lines are filled with skirmish lines—single mines strung on a single conductor cable and exploding by contact only.

Many forms of movable torpedoes for harbor defense have been tried in different countries with varying degrees of success. For accuracy of direction and range of destructive power the Sims-Edison fish torpedo is perhaps unexcelled. Extended trials at Willet's point have satisfactorily demonstrated its ability to carry 200 pounds of dynamite to a distance of two miles at a speed of about twenty miles per hour. The charge is exploded upon contact with the vessel or by the action of the operator on shore.

The dirigibility of the torpedo is perfect. It follows its prey as though endowed with life, swerving to the right or left as necessary, diving under booms or other obstructions, cutting through nets, and never slackening its great speed until the end of its cable is reached. At present a two mile radius is deemed sufficient, although this could be increased if necessary by enlarging the "fish" itself.—Cosmopolitan.

Confederate Camp Flags.

The Confederate stars and bars were in 1863 supplemented by the camp flag. This was in size and shape like the other, except that it was white, with no stripes, and the battle flag in the upper corner next the staff. It was found deficient in actual service in that, displaying so much white, it was sometimes apt to be mistaken for a flag of truce, and on Feb. 24, 1863, it gave place to the last flag of the Confederacy, the outer half being a red vertical bar. Appearing so late in the war, it was not so familiar as the others—in fact, it was comparatively little known.—New Orleans Times-Democrat.

The Largest Ocean Steamers.

The largest passenger steamships in commission are the sister ships City of New York and City of Paris, each having 10,449 tons displacement. The steamship having the largest accommodations for cabin passengers is the Cunarder Eturia, which can carry 550. The longest steamship is the Teutonic, 565 feet.—New York Advertiser.

Bowknots Still in Favor.

The rage for bowknots shows no signs of abating. Easter gifts were devised of them in every form.

SEVEN LIVING EX-SPEAKERS.

The Oldest of the Number is Robert C. Winthrop.

Hon. Robert C. Winthrop, of Boston, recently celebrated the eighty-third anniversary of his birth. There is perhaps no man in the United States today in the storehouse of whose mind are treasured more recollections of celebrated Americans and notable events. Mr. Winthrop enjoys the distinction of having been acquainted with every president of the United States except Washington and Jefferson. He visited Charles Carroll, the last surviving signer of the declaration of independence, in 1832, and four years later he was the guest of Hon. Paine Wingate, then the only living ex-member of the first senate of the United States.



HON. R. C. WINTHROP.

There are now alive seven ex-speakers of the national house of representatives. They are Robert C. Winthrop, of Massachusetts; Galusha A. Grow, of Pennsylvania; James G. Blaine, of Maine; J. Warren Keifer, of Ohio; John G. Carlisle, of Kentucky; Thomas B. Reed, of Maine; and Nathaniel P. Banks, of Massachusetts.

Of these Mr. Winthrop is the oldest. By a remarkable coincidence six of this distinguished septet met in Washington on a recent occasion.

Hon. Robert C. Winthrop early in life agreeably surprised his friends and acquaintances. His youthful training was such as would have fitted him for a career of luxury and social successes, but this was not to his liking and he devoted himself to affairs of state. He became a member of the Whig party when it was still in its infancy. His ability gained almost immediate recognition, and at the age of twenty-four he was elected to the Massachusetts legislature. He served three terms on the floor of the house and three terms as speaker. Soon after the election of General William Henry Harrison to the presidency Hon. Abbott Lawrence resigned his seat in congress from the Boston district and Mr. Winthrop became his successor. When he took his seat in 1840 he was but thirty-one years of age. He was afterward elected speaker, and it is said that he made as good a presiding officer (Henry Clay not excepted) as the national house of representatives has ever had.

In 1850 Daniel Webster resigned his seat in the United States senate to become secretary of state in Mr. Fillmore's cabinet, and Governor Briggs appointed Mr. Winthrop to the vacancy thus created. He served with distinction in the senate, since his retirement from which he has taken little part in active politics. Mr. Winthrop is one of the oldest living graduates of Harvard. His name is intimately associated with many events of national importance. He delivered the oration at the laying of the cornerstone of the Washington monument, July 4, 1848, and was also to have been the orator when it was unveiled, Feb. 22, 1885, but illness kept him away, so that his address had to be read by some one else. He retains his health and strength to a remarkable degree.

The Home of Henry Clay.

At Ashland, the famous home of Henry Clay, the great granddaughter of that noted Kentucky statesman recently became the wife of a Louisville lawyer.

The house, a spacious red brick pile, covered in many places with English ivy planted by Mr. Clay himself, is upon a gentle eminence. From the front door a fine view is had of Lexington, a mile distant, the oldest city in the state, and beyond, across the hazy domes and roofs and spires of the intermediate town, in the Lexington cemetery, the monument to Clay erected by the state looms loftier than any other object in the landscape.



ASHLAND.

At the back of the house, circumscribing a tennis court, is a picturesque walk, hidden from view by a rich tangle of oldtime garden shrubs and flowers. This path was the favorite walk of Mr. Clay.

Ashland is named for Henry Clay's first home in Hanover county, Va. His granddaughter, Miss Annie Clay, married Major Henry Clay McDowell, one of the most prominent of Kentuckians and owner of many of the finest horses in the country. It is the oldest daughter of this couple, Miss Nannette McDowell, who has just been married to Dr. F. S. Bullock, of Louisville. The bride, who is a dainty, diminutive little "blonde cendree," a simple hearted, big brained womanly woman, was a flower in her sumptuous robes of rich cream silk heavily brocaded in arabesques of satin. Duchesse lace caught here and there with orange blossoms decked profusely her skirt and corsage. With her roses she carried the same point lace handkerchief her mother had borne to the altar.

Bishop T. U. Dudley performed the ceremony, assisted by Rev. E. H. Ward.

Deer Come High.

Every stag that falls in a Scottish forest, it has been calculated, costs the lessee from thirty-five to fifty pounds, but, as what is termed "butcher's meat," these animals, if placed on the market, would not yield to those who killed them more than sixpence per pound.

Actors were so much admired by the late Dr. Morell Mackenzie that he never charged them for medical advice.



Rev. William Hollinshead
Of Sparta, N. J., voluntarily says:
"To Whom It May Concern:
"Unasked I deem it my duty to a suffering humanity whose bodies and souls I would have healthy, to tell them of the value of Hood's Sarsaparilla. While living in Ohio one of my children was greatly

Afflicted With Boils
having 30 on her limbs, and being unable to walk. I had heard of Hood's Sarsaparilla, and bought a bottle, half of which cured entirely. Two years after, another child was afflicted as badly. I used the other half bottle of Hood's Sarsaparilla with like results. About four years after, the child first afflicted was again tormented like Job, and I bought a bottle (on Sunday at that) and again a cure. I gave some of the medicine to a poor woman and two children; they were helped as were mine. Through a testimonial sent to C. I. Hood & Co., inquiries came from all the country, asking if it was a "bona fide" testimonial, and of course I wrote all that it was, and have the knowledge of

Scores and Scores
Of persons helped or cured by Hood's Sarsaparilla. Mild cases of rheumatism have yielded to it. Biliousness and bad liver have been corrected in my own family. This is the only patent medicine I have felt like praising. I speak not for C. I. Hood, but for the Jobs who are impatient and are tormented beyond endurance. Nothing I know of will cleanse the blood, stimulate the liver, or clean the stomach so perfectly as

Hood's Sarsaparilla
Any person wishing to know more, enclosing a stamp will be informed. Yours for the health, happiness and virtue of humanity."
WILLIAM HOLLINSHEAD, pastor of Presbyterian Church, Sparta, N. J.

Hood's Pills cure habitual constipation.

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List of Patents

Granted to New Jersey Inventors this week. Reported by C. A. Snow & Co., Solicitors of American and Foreign Patents, opp. U. S. Patent Office, Washington, D. C.: F. Batzel, Riverside, folding umbrella; H. A. Brennan, Jersey City, transom-lifter; W. E. Brook, Plainfield, gluing-machine; J. Crossley, Trenton, apparatus for moulding earthenware, etc.; T. A. Edison, Llewellyn Park, extracting gold from sulphide ores, ore-conveying apparatus, dust-proof swivel-shaft bearing; S. B. Ferris, Lakewood, garment-supporter; D. Hand, Netherwood, rein-support; J. and H. B. Howard, Englewood, brake mechanism for cars; R. M. Johnson, Flemington, dumping freight-car; L. A. Macini, Montclair, harness saddle; T. E. McKenna, Newark, bicycle; J. Meyer, Jersey City, electric heat-alarm; T. Miller, Jersey City, valve-funnel; J. F. Murphy, Paterson, compound engine; T. H. Patenall, Rahway, locking device for switch and signal operating mechanism; J. P. Schmidt, Jersey City, machine for forming fuel-bricks.

Rev. William Hollinshead.

Pastor of the Presbyterian Church of Sparta, N. J., voluntarily writes in favor of Hood's Sarsaparilla. He says: "Nothing I know of will cleanse the blood, stimulate the liver or clean the stomach like this remedy. I know of scores and scores who have been helped or cured by it."

The highest praise has been won by Hood's Pills for their easy, yet efficient, action.—Advt.

Specimen Cases

S. H. Clifford, New Castle, Wis., was troubled with rheumatism and rheumatism, his stomach was disordered, his liver was affected to an alarming degree, appetite fell away, and he was terribly reduced in flesh and strength. Three bottles of Electric Bitters cured him. Edward Shepard, Harrisburg, Ill., had a running sore on his leg of eight years' standing. Used three bottles of Electric Bitters and seven boxes of Bucklen's Arnica Salve, and his leg is sound and well. John Speaker, Catawba, O., had five large Fever Sores on his leg; doctors said he was incurable. One bottle of Electric Bitters and one box Bucklen's Arnica Salve cured him entirely. Sold at Geo. M. Wood's Drugstore.—Advt.

A. W. ALMQVIST,
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PATENT ATTORNEY AND EXPERT

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A "Special Sale" often means that a house is offering goods which are out of style or damaged. You buy only because of the cut prices—the goods disappoint you.

The Special Sale here next week will be a very different sort of affair from this. It consists wholly of NEW SPRING AND SUMMER DRESS GOODS.

No old styles, no damaged or shopworn goods—everything fresh and attractive, yet at largely reduced prices.

Here are some of the bargains: 8 pieces 40-in. all-wool seaside and mountain suitings, 29c., reduced from 39c. 6 pieces Camel's Hair Foule, 44c., from 69c. 8 pieces 40-in. Foule Beige, 59c., from 85c. 7 pieces fancy Bedford Cords, grays and browns, in serpentine and diagonal effects, 75c., from \$1. French all-wool Plaids, 50c., 60., and 75c., reduced from 75c., 87c., and \$1. 54-in. all-wool Chevron Camel's Hair effects, 75c., from \$1. 40-in all-wool Mixed Cheviots, for travelling dresses, 39c., from 50c. 45-inch Storm Serge or Cheviots, 60c., formerly 85c., 54-in. all-wool Cheviots at \$1.10, formerly \$1.25. 40-in. Tufted Camel's Hair Cheviots, 75c., formerly \$1.

At the next counter to these reduced Spring Dress Goods you will find a large and varied stock of Parasols and Umbrellas, from \$1 up to \$12.50. We sell a 24-in. Gloria, warranted in wearing qualities, for \$1.25. The Club Coaching Parasol—the most popular this season—costs from \$2 to \$6.50. Another popular kind is of changeable or plain Surah with one or two ruffles. It sells at \$3.50.

Look at our Challies while you are here. They vary in price from 15c. to 60c. a yard.

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Fine quality Linoleum, worth 60c. yd., for only.....	39c.	80 boxes of fine Writing Paper and envelopes, hardly two boxes alike, nothing poor in the lot. Reg. value 15c. to 35c. While they last at only.....	25c.
Solid Gold Baby Rings, set with three stones. Reg. price 50c. while they last at only.....	25c.	One lot of H. & S. R. & G. and Warner Bros.' corsets in white drab and black (termed Manufacturer's seconds, imperfections hardly perceptible. Reg. prices 15c. to \$1.98. While they last, on centre table, 1st floor, at only.....	12 1-2c.
Fine hand painted satin Fans, olive wood sticks. Reg. price 65c., for only.....	25c.	44 inch fine Union silk twill Sun Umbrellas (Bee Hive everlasting wear), with mounts of silver, gold, mourning and novelties of many sorts. Reg. \$2.25 to \$2.50, for only.....	63c.
Ladies' fine quality Swiss handkerchiefs, embroidered style, of 25c. value, for only.....	12 1-2c.	Fancy trim Night Shirts, of good strong muslin, felled seams, and well finished throughout. Reg. price 60c., for this sale for only.....	63 1-2c.
Ass't shapes in Milan Chip, Mohair and Milan fancy edge straw hats. Regular price \$1 to 1.49, for only.....	63c.	Misess' regular made plain black cotton hose, with white soles. Reg. price 25c. and 30c. for only.....	50c.
Men's fine calf skin shoes, lace or congress styles, broad and narrow toe, tipped and plain. Our regular \$2.45, equaling \$2.75 and \$3.00 reg. trade seller, for only.....	63 1-2c.	Boys' Walrus, in the Perole, Indigo and Flannellette stripes. Reg. 50c. quality, for only.....	50c.
300 fine all leather covered lap writing tablets in black and tan pebble leather and in fancy pressing, with patent non-spilling ink wells. This is a great offer, as the ink well alone is worth almost the price we ask for the tablet complete. Reg. \$1.00 to \$1.25, for only.....	50c.		

Thousands were well repaid last week, and thousands more will find it week just as promising a time for profitable purchasing as last.

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